

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS:

1-17. (cancelled)

18. (new) A method of manufacturing a solid carrier-based microbial inoculant capable of natural phosphorous supply of plants, biological control of soil born plant pathogens, biological degradation of organic contaminants, and improvement to soil life and fertility, said method comprising:

manufacturing at a temperature greater than 700°C material core temperature in absence of oxygen resulting in the carrier comprising phosphorus and animal bone charcoal and being nitrogen free and free of any heavy metal or organic/inorganic contamination which can inhibit microbial activity; and

with at least one aerobic soil microorganism produced by a combined liquid and solid state fermentation process, biologically actively colonizing the external surface and/or internal surface and/or internal pores of the carrier such that biological interactions occur between the carrier and the microorganisms.

19. (new) The method according to claim 18, wherein the water content of the microorganisms colonized in the carrier

is decreased to less than 45 w/w % at a temperature of less than 50 °C core temperature.

20. (new) The method according to claim 18, wherein the carrier is fermented and colonized by more than one microbial strains in consortium.

21. (new) The method according to claim 19, wherein the carrier is fermented and colonized by more than one microbial strains in consortium.

22. (new) The method according to claim 18, wherein the carrier is absorption pre-impregnated with nutrient.

23. (new) The method according to claim 20, wherein the carrier is absorption pre-impregnated with nutrient.

24. (new) A solid carrier-based microbial inoculant capable of natural phosphorous supply of plants, biological control of soil born plant pathogens, biological degradation of organic contaminants, and improvement to soil life and fertility, said microbial inoculant manufactured by the steps of:

manufacturing at a temperature greater than 700°C material core temperature in absence of oxygen resulting in the carrier comprising phosphorus and animal bone charcoal, and being nitrogen free and free of any heavy metal or organic/inorganic contamination which can inhibit microbial activity; and

with at least one aerobic soil microorganism produced by a combined liquid and solid state fermentation process, biologically actively colonizing the external surface and/or internal surface and/or internal pores of the carrier such that biological interactions occur between the carrier and the microorganisms.